Measurement Detail and Standards
Maintenance and Repair

Measurement

Trouble Report Rate

Function
Frequency of Troubles

Calculation Methodology
Trouble Report Rate = Σ [(Count of Initial and Repeated Trouble Reports in the Current Period) / (Number of Lines in Service at End of the Report Period)] x 100

Business Rules
The frequency of trouble metric is computed by accumulating, by standard service grouping and disposition and cause, the total number of maintenance tickets logged by a CLEC (with the ILEC) during the reporting period. The resulting number of tickets for each trouble type is accumulated within each standard service grouping and trouble type is divided by the total number of "service access lines" existing for the CLEC at the end of the report period

- Unbundled loops or UNE combinations involving unbundled loops would be counted as a "service access line."
- A trouble is "resolved" when the ILEC issues notice to the CLEC that the customer's service is restored to normal operating parameters. If the ILEC-to-CLEC maintenance interface allows the CLEC to check the status of pending open and tickets closed that day then no notification is required. But if no consolidated report is available, the CLEC must receive notification when each ticket is closed and the cause code..
- If a trouble ticket was closed out previously with the disposition code wrongly classifying it as FOK/TOK/CPE then the trouble must be counted as both an initial and a repeat trouble report.
- For purposes of ILEC's own results, the ILEC closure of a trouble ticket (whether automatic or manual) is considered equivalent to returning a trouble resolution notice to the CLEC.
- Excluded situations:
  - Trouble tickets that are canceled at the CLEC request
  - ILEC trouble reports associated with administrative service
  - Subsequent trouble report(s) on a maintenance ticket that has (have) not been reported as resolved (or closed)
  - Instances where the CLEC or an ILEC customer requests that a ticket be "held open" for monitoring, or where a trouble ticket is created to track and/or monitor requests for clarifying information (e.g. confirmation of customer ownership from CLEC support centers)
  - Tickets used to track referrals of misdirected calls
  - Mutually agreed upon "no trouble found" (CPE/TOK/FOK)

Levels of Disaggregation and Data Retention Requirements
See Appendix B

Performance Standard
1 per 100 lines

Measurement Detail and Standards
Maintenance and Repair

Measurement

Repeat Trouble Report Rate

Function
Frequency of Repeat Troubles

Calculation Methodology
Repeat Trouble Report Rate = Σ [(Count of Trouble Reports Where More Than One Trouble Report Was Logged for the Same Service Access Line Within a Continuous 30 Day Period) / (Number of Reports in the Report Period)] x 100

Business Rules
The repeat trouble report rate measure is computed by accumulating the number of instances where a trouble ticket is submitted by a CLEC to the ILEC for a service arrangement that had at least one prior trouble ticket any time in the 30 calendar days preceding the creation of the current trouble ticket. The number of repeat troubles are accumulated for the reporting period by service type and trouble type. The count of repeat troubles, by service type, is divided by the count of initial trouble reports (by service type) received during the report period.

- If a trouble ticket was closed out previously with the disposition code wrongly classifying it as FOK/TOK/CPE then the trouble must be counted as both an initial and a repeat trouble report.
- Unbundled loops or UNE combinations involving an unbundled loops are considered a "service access line".
- The "same service access line" means a trouble report being reported for the same telephone number or the same circuit identifier.
- The trouble resolution need not be identical between the repeated reports for the incident to be counted as a repeated trouble.
- For purposes of ILEC's own results, the ILEC closure of a trouble ticket (whether automatic or manual) is considered equivalent to returning a trouble resolution notice to the CLEC.
- Excluded situations:
  - Trouble tickets that are canceled at the CLEC request
  - ILEC trouble reports associated with administrative service
  - Instances where the CLEC or an ILEC customer requests that a ticket be "held open" for monitoring, or where a trouble ticket is created to track and/or monitor requests for clarifying information (e.g. confirmation of customer ownership from CLEC support centers)
  - Subsequent trouble report(s) on a maintenance ticket that has (have) not been reported as resolved (or closed)
  - Tickets used to track referrals of misdirected calls
  - Mutually agreed upon "no trouble found" (CPE/TOK/FOK)

Levels of Disaggregation and Data Retention Requirements
See Appendix B

Performance Standard
6 per 100 trouble reports

Measurement Detail and Standards
Maintenance and Repair

Measurement and Purpose

Percent Found OK/Test OK/CPE

Function
Frequency of Troubles

Calculation Methodology
Percent Found OK/Test OK/CPE = Σ [(Count of All Troubles With Resolution Codes of CPE/TOK/FOK) / (Number of Troubles During the Reporting Period)] x 100

Business Rules
- Unbundled loops or UNE combinations involving an unbundled loops are considered a "service access line".
- For purposes of ILEC's own results, the ILEC closure of a trouble ticket (whether automatic or manual) is considered equivalent to returning a trouble resolution notice to the CLEC.
- Excluded situations:
  - Trouble tickets that are canceled at the CLEC request
  - ILEC trouble reports associated with administrative service
  - Instances where the CLEC or an ILEC customer requests that a ticket be "held open" for monitoring, or where a trouble ticket is created to track and/or monitor requests for clarifying information (e.g. confirmation of customer ownership from CLEC support centers
  - Subsequent trouble report(s) on a maintenance ticket that has (have) not been reported as resolved (or closed)
  - Tickets used to track referrals of misdirected calls

Levels of Disaggregation and Data Retention Requirements
See Appendix B

Performance Standard
Diagnostic, but remedies may be sought if raw data indicates that trouble reports were wrongly excluded because of errors in coding FOK/TOK/CPE

Measurement Detail and Standards
Maintenance and Repair

Measurement

Troubles within 30 Days of Install and Other Order Activity

Function
Frequency of Troubles on new installs/orders

Calculation Methodology
Troubles Within 30 Days of Installations and Other Order Activity = Σ [(Total Number of Trouble Tickets Associated With Lines That Had Service Order Activity Within 30 Days of the Trouble Report) / (Total Number of Service Orders Completed in the Report Period)] x 100

Business Rules
The results are computed by accumulating the number of trouble tickets submitted by a CLEC to the ILEC for a service arrangement that had at least one install or service order activity within the 30 calendar days preceding the creation of the current trouble ticket. The count of troubles is divided by the count of service-affecting orders completed by the ILEC for the CLEC during the report period.

Non-parity results for Trouble Rate within 30 Days of Install and Other Order Activity may require further reporting to determine root cause issues. For instance, reports on whether facilities provided on new installations tested to industry standard per interconnection contract, tariff or regulatory requirements may be required if results indicate a poorer performance of facilities and supporting network equipment provided to CLECs. ILECs also may need to cooperate with CLECs on comparative mechanized line testing (through respective ILEC and CLEC switches) of the transmission quality of ILEC loops versus CLEC unbundled loops obtained from the ILEC. Reporting dimensions of copper versus fiber deployment may show that CLEC install troubles result from a disparity in use of underlying transmission media for install of ILEC vs. CLEC facilities. The broadening of the measure to include more than just new installs will detect new service activations (hunt group changes, other feature additions) that cause troubles versus network transmission quality.

- If CLEC is unable to report trouble to the ILEC through normal channels, ILEC must still track trouble through alternate means.
- Excluded situations:
  - Trouble tickets that are canceled at the CLEC request
  - ILEC trouble reports associated with administrative service
  - Instances where the CLEC or an ILEC customer requests that a ticket be "held open" for monitoring, or where a trouble ticket is created to track and/or monitor requests for clarifying information (e.g. confirmation of customer ownership from CLEC support centers)
  - Tickets used to track referrals of misdirected calls
  - Mutually agreed upon "no trouble found" (CPE/TOK/FOK)

Levels of Disaggregation and Data Retention Requirements
See Appendix B

Performance Standard
Less than 1.5 failed circuits per 100 service orders installed in the report period

Measurement Detail and Standards
Maintenance and Repair

Measurement

Percent of Customer Troubles Resolved Within Estimate

Function
Estimated Time to Restore

Calculation Methodology
Percent Customer Troubles Resolved Within Estimate = Σ [(Count of Customer Troubles Resolved By The Quoted Resolution Time and Date) / (Count of Customer Troubles Tickets Closed)] x 100

Business Rules
The quoted repair completion date and time are compared to the actual repair date and time (ticket closure as defined in Time to Restore metric). In each instance where the actual repair date and time are on or before the initially provided estimated or quoted date and time to restore, the count of "troubles resolved within estimate" is incremented by one for the relevant "service type" and "trouble type." The resulting count is divided by the total number of troubles resolved (for the consistent service and trouble type), for the report period, in all instances where an estimated interval was provided or a standard interval existed.

- The ILEC analog for this measure is derived by comparing the actual date and time of ILEC trouble ticket closure compared to the projected trouble clearance date and time established through the ILEC agent's on-line interaction with the ILEC's work management system, regardless of whether or not the ILEC currently quotes this information to its retail customer.
- The "quoted" or "estimated" time to restore is the actual scheduled time projection returned by the ILEC work management system or the standardized repair interval that the ILEC uses for its own operations when equivalent service arrangements are involved.
- A trouble is "resolved" when the ILEC issues notice to the CLEC that the customer's service is restored to normal operating parameters.
- If the ILEC supplies only the estimated repair interval, then the estimated date and time of repair is determined by adding the repair interval to the date and time that the CLEC logged the repair request with the ILEC.
- For purposes of ILEC's own results, the ILEC closure of a trouble ticket (whether automatic or manual) is considered equivalent to returning a trouble resolution notice to the CLEC.
- Excluded situations:
  - Trouble tickets that are canceled at the CLEC request
  - ILEC trouble reports associated with administrative service
  - Instances where the CLEC or an ILEC customer requests that a ticket be "held open" for monitoring, or where a trouble ticket is created to track and/or monitor requests for clarifying information (e.g. confirmation of customer ownership from CLEC support centers)
  - Subsequent trouble report(s) on a maintenance ticket that has (have) not been reported as resolved (or closed)
  - Tickets used to track referrals of misdirected calls

Levels of Disaggregation and Data Retention Requirements
See Appendix B

Performance Standard
98% met, 2% missed

Measurement Detail and Standards
General

Measurement

Percent Systems Availability

Function
Systems Availability

Calculation Methodology
Percent System Availability = Σ [(Hours Functionality is Available to CLECs During Report Period) / (Number of Hours Functionality was Scheduled to be Available During the Period)] x 100

Business Rules
For CLEC Results: The total "number of hours functionality was scheduled to be available" is the cumulative number of hours (by date and time on a 24-hour clock) over which the ILEC planned to offer and support CLEC access to ILEC OSS functionality during the reporting period. The ILEC must provide a minimum advance notice of one reporting period regarding availability plans and such plans must be interface-specific. If scheduled availability is not provided with at least one report period's advance notice, then the default availability for the subsequent reporting period will be seven days per week, 24 hours per day.

"Hours Functionality is Available" is the actual number of hours, during scheduled available time, that the ILEC gateway or interface is capable of accepting CLEC transactions or data files for processing in the gateway/interface and supporting OSS. The actual time available is divided by the scheduled time available and then multiplied by 100 to produce the percent system availability measure. The percent system availability measure is required for each unique interface type achieved with the ILEC.

For ILEC Results: Each OSS of the ILEC that is employed in the support of CLEC operations must first be identified by supported functional area (e.g., pre-ordering, ordering and provisioning, repair and maintenance and billing) with such mapping disclosed to the CLECs. The "available time" and "scheduled available time" is gathered for each of the identified ILEC OSS during the report period. The OSS function availability is computed based upon the weighted average availability of the subtending support OSS. That is, the available time for each OSS supporting a functional area is accumulated over the report period and then divided by the summation of the scheduled available time for those same supporting OSS.

Other Clarifications and Qualifications:
- The ILEC analogs for this performance measure are the internal measures of system downtime (or up time) typically established between the ILEC Systems Management Organization and the client organizations.
- OSS scheduled and available time may be utilized in the computation of more than one functional area.
- Parity exists if the CLEC percent system availability results are ≥ ILEC function availability for the functionality accessed by the CLEC.
- "Capable of accepting" must have a meaning consistent with the ILEC definition of down time, whether scheduled or unscheduled for internal ILEC systems having a comparable potential for customer impact.
- Time is measured in hours and tenths of hours rounded to the nearest tenth of an hour.
- CLEC self-reporting of interface downtime is inadequate by itself but logs of CLEC reports of downtime must be kept and available upon request for auditing ILEC reports.

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
Less than 0.1% of unscheduled downtime; no scheduled downtime during prime time operating hours

Measurement Detail and Standards
General

Measurement

Mean Time to Answer

Function
Center Responsiveness

Calculation Methodology
Mean Time to Answer Calls = Σ [(Date and Time of Call Answer - Date and Time of Call Receipt) / (Total Calls Answered by Center)]

Business Rules
For CLEC Results: Mean time to answer calls is measured through call management technology utilized to distribute calls to ILEC agents supporting all CLEC activities. Results are to be provided separately for each center handling CLEC inquiries. If centers used by the ILEC support multiple functions (e.g., both maintenance and provisioning) then the results for each function supported should be separately reported.

Speed of answer is determined by accumulating elapsed time from entry of CLEC call into ILEC call management system until CLEC call is transferred to ILEC personnel assigned to handle CLEC calls for assistance. The elapsed time is measured in seconds and tenths of seconds rounded to nearest tenth of a second. The accumulated elapsed time is divided by count of calls transferred to ILEC agents.

For ILEC Results: Speed of Answer, as it relates to the ILEC, will be measured in an identical manner as described for the CLEC. The results for the ILEC business office operations and its repair bureau operations should be separately accumulated, computed and retained. If further distinctions are made or more discrete tracking is performed within the ILEC call receipt centers (e.g., by business and residence), then results should be reported at the lowest possible level of detail. Where call receipt for such operations are commingled and inseparable, then only a single result for each measure will be generated and serve as the comparative result for both the CLEC repair support and the CLEC provisioning support results.

Other Clarifications and Qualifications:
- ILEC Agent answering and placing the caller on hold does not stop the clock. Any call placed on hold before the CLEC representative can ask question/report trouble has not met the standard.
- A voice response unit (VRU) does not stop the clock. For a call to be considered answered, the live ILEC Agent must handle the CLEC request.
- Results may be reported for aggregate CLEC industry to the extent that separate carrier-specific support centers are not provided. If separate centers are provided (either for a CLEC or group of CLECs) then results shall be gathered and supplied for each center based on specific CLEC support. Support center types include supporting CLEC maintenance and provisioning, ILEC center supporting retail customer maintenance calls and business office inquiries, etc.
- If ILEC call management technology cannot measure speed of answer on call-specific basis, then an alternate methodology simulating answer speed based on average time for component parts of call (e.g., queue to VRU + VRU to queue + queue to agent answer) can be used by mutual consent of ILEC and CLECs.
- Excluded situations:
  - Calls abandoned by customers prior to answer by the ILEC

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
Live Agent: 90% of calls answered in 10 seconds
VRU: 100% of calls answered by live agent within 2 seconds of transfer

Measurement Detail and Standards
General

Measurement

Call Abandonment Rate

Function
Center Responsiveness

Calculation Methodology
Call Abandonment Rate = Σ [(Count of Calls Terminated Before Answer During the Reporting Period) / (Count of All Calls Placed in Queue During the Reporting Period)]

Business Rules
Call abandonment rates are monitored through the call management technology utilized to distribute calls to ILEC agents supporting CLEC activities (i.e., call receipt personnel staffing ILEC support centers intended for CLEC use). Results are to be provided separately for each center handing CLEC inquiries. If centers deployed by the ILEC support multiple functions (e.g., both maintenance and provisioning) then the results for each function supported should be separately reported.

The Call Abandonment Rate is based on the number of calls received by the call distribution system of the ILEC center for the reporting period, regardless of whether the call actually is transferred to ILEC personnel for processing. In addition, a count is accumulated of all calls that are subsequently terminated by the calling party or dropped due to equipment failure before transfer to the service agent for processing. The accumulated count of calls abandoned (terminated) is divided by the total count of calls received at the monitored center.

- A voice response unit (VRU) does not stop the count for purposes of the call abandonment rate if the caller terminates or is terminated prior to transfer to the ILEC Agent for processing.
- Results may be reported for CLEC industry in aggregate to the extent that separate carrier-specific support centers are not provided. If separate centers are provided (either for an individual CLEC or a group of CLECs) then results should be gathered and supplied for each center and reported to the CLEC(s) based upon the center providing the specific CLEC support. Support center types include center supporting CLEC maintenance and provisioning and ILEC Center supporting retail customer maintenance calls and business office inquiries etc.

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
No more than 0.5% of calls abandoned

Measurement Detail and Standards
General

Measurement

Average Response Interval for OSS Queries

Function
Average Response Interval for Real-Time OSS Queries

Calculation Methodology
Average Response Interval = Σ [(Query Response Date and Time - Query Submission Date and Time) / (Number of Queries Submitted in Reporting Period)]

Business Rules
The response interval for each query is determined by computing the elapsed time from the ILEC receipt of a query from the CLEC, whether or not syntactically correct, to the time the ILEC returns the requested data (or reject notification) to the CLEC. Elapsed time is accumulated for each major query or transaction type, consistent with the specified reporting dimension, and then divided by the associated total number of queries received by the ILEC during the reporting period.

- The elapsed time for an ILEC query is measured from the point in time when the ILEC customer service agent submits the request for identical or similar information into the ILEC OSS until the time when the ILEC OSS returns the requested information to the ILEC customer service agent, or a hard copy of the information is returned to the ILEC customer service agent.
- As additional functionality is established by the industry, for example with respect to unbundled network elements, the reporting dimensions may be expanded.
- Elapsed time is measured in seconds and tenths of seconds rounded to the nearest tenth of a second.
- Elapsed time is to be measured through automated rather than manual monitoring and logging.

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
Pre-Ordering
Telephone Number Reservations:
1-30 telephone numbers in 2 seconds and none (0%) greater than 5 seconds
31 or more telephone numbers in less than 2 hours
Address Verification: 2 seconds
CSR: 5 seconds
Service Availability: 5 seconds
Due Date: 2 seconds
Dispatch: 8 seconds
PIC: Parity
LIDB: 2s
Directory Listings: Parity
Maintenance

- The standard for all categories below is parity.
  - Create (or confirm logging of) a Maintenance Request
  - Obtain Status
  - Obtain Test Results
  - Cancel Request
  - Rejected of Failed Queries (regardless of type)
  - Clearance Notification
  - Closure Notification

:

Measurement Detail and Standards
General

Measurement

Average Notification of Interface/OSS Outage

Function
Reporting Interface/OSS Outages

Calculation Methodology
Average Notification of Interface/OSS Outage = Σ [(Date and Time of Outage Notification to CLECs - Date and Time of ILEC Awareness of Interface/OSS Outage) / (Number of Interface Outages in Reporting Period)]

Business Rules
Average Notification of Interface/OSS Outage is the time it takes from when ILEC first learns of an OSS/interface outage to the time it takes to notify the CLEC. ILEC will report by each interface used by CLECs for pre-ordering, ordering and maintenance. Notifications will be provided by email and will not be considered received unless email is directed to appropriate CLEC designated point(s) of contact for receiving interface outage information.

To extent known, email should obtain information on estimated time of restoration for the interface.

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
15 minutes

Measurement Detail and Standards
General

Measurement and Purpose

Percent of Change Management Notices On-Time

Function
Change Management

Calculation Methodology
Percent of Change Management Notices Sent On Time = Σ [(Change Management Notifications Sent Within Required Time Frames) / (Total Number of Change Management Notices Sent)] x 100

Percent ILEC Changes vs. CLEC Changes Made = Σ ([Number of Type 5 CLEC-Initiated Changes Implemented in Period) / (Total Number of CLEC Changes Requested] x 100; and Σ [(Number of Type 4 ILEC-Initiated Changes Implemented in Period) / (Total Number of ILEC Changes Requested)] x 100

- Ratios will be expressed in terms of percentage and compared. Counts of rejected and pending requests also will be reported monthly for both Type 4 and Type 5 categories.

Business Rules
- This metric is designed to measure the percent of change management notices sent to the CLEC according to notification standards and timeframes prescribed by the Parties' Change Management Agreement.
- Each type of change management notice is to be reported separately (see Appendix C).
- All intervals are measured in hours and hundredths of hours rounded to the nearest hundredth.
- The accumulation of elapsed time is based on business days/hours.
- Change notification must comply with agreed upon business rules for notification procedures and definition of type of change.
- Any changes made without notification will be considered "sent late".

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
98% on-time notification

Measurement Detail and Standards
General

Measurement

Percent Software Certification Failures

Function
OSS Software Change Problems

Calculation Methodology
Percent Software Certification Failures = Σ [(Number of Test Transactions in Test Deck – Count of Changes Required Due to CLECs Experiencing Malfunctions) / (Number of Test Transactions in Test Deck)] x 100

Business Rules
- ILEC test deck may either represent regression testing of a new software release or progression testing of software being released for the first time. A regression test deck is a collection of test scenarios designed to verify that functionality in a software release that was available in a previous release continues to work as prescribed. A progression test deck is a collection of test scenarios designed to verify that functionality in a software release that is being introduced for the first time (or is being removed) works as prescribed.
- Test scenario is a description of a business event and the systems transactions performed to accomplish the business event. Test scenarios also include pre-conditions, input date and expected results.
- During a 30 day period following release to production, ILEC will track the number of changes required as a result of CLEC experiencing malfunctions during the execution of transactions directly related to the pre-defined conditions in the test desk.
- ILEC may exclude any CLEC malfunctions if both parties agree that malfunctions were CLEC's fault. If parties cannot agree on fault, then ILEC must report the number of malfunction incidents in dispute.

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
No more than 0.1% of test deck transactions should result in CLEC problems

Measurement Detail and Standards
General

Measurement

On-time Response to Bona Fide Request (BFR)

Function
Pricing

Calculation Methodology
On-time Response to BFR = Σ [(Total Number of BFR Requests Processed in X Days) / (Total Number of BFR Responses Due in Reporting Period)] x 100

Business Rules
- Elapsed time is measured in business days/hours. Clock starts when ILEC receives the CLECs application and stops when the CLEC receives a response containing preliminary pricing from the ILEC.
- "X" equals interval specified in the interconnection agreement or in state Commission rules.

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
98%

Measurement Detail and Standards
General

Measurement

Percent Response Commitments Met (On-Time)

Function
Timeliness of Center Responses to CLEC Inquiries

Calculation Methodology
Percent Response Commitments Met = Σ [(Number of Response Commitments Met) / (Number of Responses Due in Reporting Period)] x 100

Business Rules
ILEC must report on whether or not time committed to CLEC in contracts, separate agreements or at time of call are being kept by ILEC's support centers. For instance, if contract requires a response to a billing inquiry in 24 hours, then on-time responses would be those received within 24 hours after the CLEC places a query to the appropriate point of contact and compared to all the responses to billing queries due that reporting period. If an ILEC account representative promises a response in X amount of time, the metric would address whether that commitment was met compared with all the other committed answers due that month. The measurement would be equivalent to an Estimated Time to Repair or Repair Appointment Met metric applied to non-maintenance types of problems. Missed commitments are those days/hours between the time the response was due and the time the response was actually received. For ILEC retail measurement, time to respond to end user bill questions and other business office queries would be measured.

- All queries answered while the CLEC or ILEC retail customer is on the phone will be considered on time for this metric.
- Responses do not necessarily have to resolve issue but must provide additional information on the status of resolving the query. Any new response commitment provided during the partial response must be measured for on-time performance as well and will be counted as a new commitment.
- If CLEC poses more than one question on same call, ILEC may provide different response commitments for each query and measure each query separately.
- CLEC and ILEC may devise a priority rating system for measurement by which the CLEC will identify the type of query upon reaching a representative at the CLEC center and the type of response interval required for such a query. (i.e., questions regarding problems with an OSS gateway blocking order placement or pre-order queries may receive a higher priority than a question to explain a business rule that is not impeding order activity.)
- If ILEC is uncertain about whether response qualified as meeting the commitment interval, ILEC may seek CLEC agreement that response commitment has been met. Responses that no action has been taken yet on a query do not count as timely.
- If a question is posed to the wrong center, the center receiving the query will direct the CLEC immediately to the appropriate center to respond to the question.

Levels of Disaggregation and Data Retention Requirements
By Service Center: Pre-Ordering, Ordering, Billing, Other

Performance Standard
Billing = 100% in 24 hours of request for information
Pre-Ordering/Ordering Help Desk = 98% within response commitment provided by ILEC
Other = 95% within response commitment provided by ILEC

Measurement Detail and Standards
General

Measurement

Percent On-time Response to Requests for Access to Poles, Conduits and Rights of Way

Function
Ancillary Services

Calculation Methodology
Percent On-time Response to Requests for Access to Poles, Conduits and Rights of Way = Σ [(Total Number of Requests Processed in X Days) / (Total Number of Responses Due in Reporting Period)] x 100

Business Rules
- Elapsed time is measured in business days/hours. Clock starts when ILEC receives the CLECs application, and stops when the CLEC receives a response containing preliminary pricing from the ILEC.
- "X" equals interval specified in the interconnection agreement or in state Commission rules.

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
98% on-time response

Measurement Detail and Standards
General

Measurement

Percent of Requests for Access to Poles, Conduits and Rights of Way Rejected for Lack of Space

Function
Ancillary Services

Calculation Methodology
Percent of Requests for Access to Poles, Conduits and Rights of Way Rejected for Lack of Space = Σ [(Total Number of Requests Rejected in Reporting Period Due to Lack of Space) / (Total Number of Responses Due in Reporting Period)] x 100

Business Rules
- Elapsed time is measured in business days/hours. Clock starts when ILEC receives the CLECs application and stops when the CLEC receives a response containing preliminary pricing from the ILEC.
- Response due date is as outlined in the interconnection agreement.

Levels of Disaggregation and Data Retention Requirements
See Appendix C

Performance Standard
Diagnostic measurement

Measurement Detail and Standards
Billing

Measurement

Mean Time to Provide Daily Usage Feed

Function
Timeliness of Billing Record Delivery

Calculation Methodology
Mean Time to Provide Recorded Usage Records = Σ [(Data Set Transmission Date - Date of Message Recording) / (Count of All Messages Transmitted in Reporting Period)]

Business Rules
This measure captures the elapsed time between the recording of usage data generated either by CLEC retail customers or by CLEC access customers (by the AMA recording equipment associated with the ILEC switch) and the time when the data set, in a compliant format, is successfully transmitted to the CLEC. For each usage record, the calendar date and time of usage recording is compared to the calendar date and time of successful completion of data set transmission to the CLEC. The number of hours and tenths of hours elapsed between message recording and data set transmission will constitute the elapsed delivery time. The elapsed delivery time is accumulated for each usage record with the resulting total number of hours accumulated being divided by the number of complete usage records in all the data sets transmitted.

- The elapsed time for delivery of ILEC usage records is measured from the time of message recording, as captured on the ILEC's AMA tape, to the time the AMA tape is converted to billing format (EMR format or equivalent).
- Mean time to deliver usage records is to be reported separately for end user usage and access related usage.
- The usage accuracy measure identified here is similar to the type of measures that ILECs commonly institute in service contracts with long distance service suppliers who use ILEC billing services.
- Excluded situations:
  - Any usage record rejected due to formatting or content errors

Levels of Disaggregation and Data Retention Requirements
See Appendix D

Performance Standard
99.94% in 24 hours
100% in 48 hours

Measurement Detail and Standards
Billing

Measurement

Mean Time to Deliver Invoices

Function
Timeliness of Billing Record Delivery

Calculation Methodology
Mean Time to Deliver Invoices = Σ [(Invoice Transmission Date - Date of Scheduled Bill Cycle Close) / (Count of Invoices Transmitted in Reporting Period)]

Business Rules
This measure captures the elapsed number of days between the scheduled close of a Bill Cycle and the ILEC's successful transmission of the associated invoice to the CLEC. For each invoice, the calendar date of the scheduled close of Bill Cycle is compared to the calendar date that successful invoice transmission to the CLEC completes. The number of calendar days elapsed between scheduled Bill Cycle close and completion of invoice transmission will constitute the elapsed delivery time. The elapsed delivery time is accumulated for each invoice with the resulting total number of days accumulated divided by the number of complete invoices sent in the reporting period.

- The elapsed time for ILEC invoice delivery is measured from the scheduled close date of the retail customer bill cycle to the transmission of the customer bill to CLEC in a format appropriate for delivery to retail customers.
- Excluded situations:
  - Any invoices rejected due to formatting or content errors

Levels of Disaggregation and Data Retention Requirements
See Appendix D

Performance Standard
100% in 48 hours

Measurement Detail and Standards
Billing

Measurement

Percent Invoice Accuracy

Function
Accuracy of Billing Records

Calculation Methodology
Percent Invoice Accuracy = Σ [(Count of Dollars Adjusted During Billing Period) / (Total Dollars Billed In Reporting Period)] x 100

Business Rules
For CLEC Results: The completeness of content, accuracy of information and conformance of formatting will be determined based upon the terms of this agreement as outlined in Attachment VIII. The ILEC will establish a quality control process that is disclosed to CLECs and that is no less rigorous than the most rigorous quality monitoring established in the ILEC billing service contracts for long distance service providers. The quality monitoring process must be disclosed in advance and process auditing must be permitted. The records and invoices delivered by the ILEC must simultaneously meet the standards relating to content, accuracy and formatting in order to be counted as accurate.

For ILEC Results: The computation for the ILEC is identical to that described for the CLEC. The usage accuracy determination is based upon comparison of the usage records, following format conversion to the EMR (or equivalent) format as compared to the internally established content and formatting requirements. Likewise, the accuracy measure for invoice delivery will be based upon a statistically reliable comparison of ILEC invoices to the content, calculation methodology and formatting standards of the ILEC. Separate comparisons are to be made for retail service invoices and access invoices with the results compared to wholesale (total service resale) and UNE invoices, respectively.

Other Clarifications and Qualifications:
- ILEC also will provide number of billing errors that comprise total amount adjusted.
- The wholesale invoice accuracy identified here is analogous to the measures contained within the Billing Quality Assurance Programs that the ILECs have with interchange carriers for monitoring access billing quality. If a sampling process is used to monitor accuracy, then the study results must be reconfirmed no less than quarterly.
- Excluded situations:
  - Adjustments that are not related to billing errors; for example: incentive regulation credits, performance remedies, and special promotional credits, unless billed incorrectly, then they are included

Levels of Disaggregation and Data Retention Requirements
See Appendix D

Performance Standard
99.99%

Measurement Detail and Standards
Billing

Measurement and Purpose

Percent Usage Accuracy

Function
Accuracy of Billing Records

Calculation Methodology
Usage Accuracy = Σ [(Number of Usage Records Delivered in the Reporting Period That Reflected Complete Information Content and Proper Formatting) / (Total Number of Usage Records Transmitted)] x 100

Business Rules
For CLEC Results: The completeness of content, accuracy of information and conformance of formatting will be determined based upon the terms of this agreement as outlined in Attachment VIII. The ILEC will establish a quality control process that is disclosed to CLECs and that is no less rigorous than the most rigorous quality monitoring established in the ILEC billing service contracts for long distance service providers. The quality monitoring process must be disclosed in advance and process auditing must be permitted. The records delivered by the ILEC must simultaneously meet the standards relating to content, accuracy and formatting in order to be counted as accurate. This measurement is expressed as a percentage of accurate records to the total records delivered.

For ILEC Results: The computation for the ILEC is identical to that described for the CLEC. The usage accuracy determination is based upon comparison of the usage records, following format conversion to the EMR (or equivalent) format as compared to the internally established content and formatting requirements. Separate comparisons are to be made for retail service invoices and access invoices with the results compared to wholesale (total service resale) and UNE invoices, respectively.

Other Clarifications and Qualifications:
- The CLEC must report to ILEC within X days of receipt of usage records that do not have complete information content or proper formatting. Reporting will be on a delayed basis based on timeframe negotiated for CLEC to report on errors.
- This measurement captures the accuracy of the customer's service and access usage.
- The usage accuracy measure identified here is similar to the type of measures that ILECs commonly institute in service contracts with long distance service suppliers who use ILEC billing services.

Levels of Disaggregation and Data Retention Requirements
See Appendix D

Performance Standard
99.99%

Measurement Detail and Standards
Billing

Measurement and Purpose

Percent Billing Errors Corrected in X Days

Function
Timeliness of Billing Error Corrections

Calculation Methodology
Percent Billing Errors Corrected in X Days = Σ [(Number of ILEC Responses in X Days/Hours) / (Total Number of Queries in Reporting Period)] x 100

Business Rules
- This measurement applies to the daily usage feed.
- Performance for this measurement is measured at two levels:
  - Severity 1 Bill Affecting where X = 24 hours with a maximum of 5 business days to correct error
  - Severity 2 Non-Bill Affecting where X = 3 business days with a maximum of 10 business days to correct error
- Elapsed time is measured in business days/hours. Clock starts when ILEC receives the CLEC's query or request for an adjustment (whether in electronic, written or voice form) and the clock stops when the CLEC receives the correct usage record from the ILEC.
- The ILEC shall send correct usage record within X days/hours of receipt of a query.
- Only usage records fully corrected to the CLEC's specifications will be considered timely.
- Excluded situations:
  - CLEC may agree to exclude adjustments disputed by ILEC from metric. If ILEC does not wish to pursue mutual agreement on such exclusion, ILEC must report separately the number of queries in dispute at end of the month as separate sub-metric

Levels of Disaggregation and Data Retention Requirements
See Appendix D

Performance Standard
Severity 1 = 90% corrected in 24 hours and 100% in 5 business days
Severity 2 = 90% corrected in 3 business days and 100% in 10 business days

Measurement Detail and Standards

Operator Services, Directory Assistance and Listings (OS, DA & DL)

Measurement

Mean Time to Answer

Function
Speed to Answer OS/DA

Calculation Methodology
Mean Time To Answer = Σ [(Date and Time of Call Answer - Date and Time of Call Receipt) / (Total Calls Answered on Behalf of the CLECs in Reporting Period)]

Business Rules
Speed of answer is monitored through the call management technology used to distribute calls to ILEC agents supporting CLEC activities (i.e., call receipt personnel staffing Directory Assistance or Operator Service Positions). It is determined by measuring and accumulating the elapsed time from the entry of a CLEC retail customer call into the ILEC call management system queue until the CLEC retail customer call is transferred to the ILEC personnel assigned to handle CLEC calls for assistance (whether DA or OS). The elapsed time is measured in seconds and tenths of seconds rounded to the nearest tenth of a second.

- The "speed to answer" measure is directly analogous to speed of answer minimum service standards established within many states.
- Results must be reported separately for CLECs that use facilities-based interconnection, as customer calls to OS and DA will arrive at the operator center on unique facilities. For CLECs that use common facilities to deliver customer calls to the operator center, results may be reported for the CLEC industry in aggregate until the capability to measure specific CLEC results exists.
- If the ILEC call management technology cannot measure speed of answer on a call specific basis, then an alternate methodology that simulates speed of answer based upon the average time for component parts of the call (e.g. queue to VRU + VRU to queue + queue to agent answer) can be utilized by mutual consent of the ILEC and CLEC.
- Excluded situations:
  - Calls abandoned by customers prior to answer by the ILEC OS or DA Operator

Levels of Disaggregation and Data Retention Requirements
See Appendix E

Performance Standard
Parity or end-user standard, whichever is faster

Measurement Detail and Standards

Operator Services, Directory Assistance and Listings (OS, DA & DL)

Measurement

Mean Time Allotted to Proof Listing Updates

Function
Time Allotted to Proof Listing Updates Before Publication

Calculation Methodology
Mean Time Allotted to Proof Listing Updates Before Book Close Date = Σ [(Date & Time of Directory Publication Deadline – Date and Time Updates Available for Proofing) / (Total Number of Updates Provided for Proofing During Reporting Period)]. This measurement should be calculated and reported separately for First and Second Proofs.

Business Rules
Time Allotted To Proof Listing Updates encompasses the amount of review time afforded to CLECs for the purposes of validating directory listings prior to directory publication. If electronic access permits a CLEC to view, on demand, its customers' listings as they will be published, then this measure is not necessary; however, an interface availability measurement should be included within the reporting dimensions for the "General" OSS systems measurements. The directory proofing interval information should be captured and retained for each directory published. The interval is measured from the date and time the CLEC receives a final listing of customer-related information that will be contained within the ILEC's next directory publication to the final date and time for submission of changes to the listings provided. The second book close proof is required to ensure that corrections indicated in the first proof have been made.

Levels of Disaggregation and Data Retention Requirements
See Appendix E

Performance Standard
First Proof: 60 calendar days prior to Directory Close Date
Second Proof: 14 calendar days prior to Directory Close Date

Measurement Detail and Standards
Network Performance

Measurement

Percent Call Completion

Function
Interconnect Traffic Engineering/Trunking Capacity

Calculation Methodology
Percent Call Completion = Σ [(Total Number of Blocked Call Attempts (Separate Measures For Inbound and Outbound) During the Busy Hour) / (Total Number of Call Attempts During Busy Hour)] x 100

Business Rules
For CLEC Results: For determining call blocking, the number of CLEC customer call attempts where the customer dials a valid telephone number is accumulated for the reporting period. The number of blocked call attempts experienced by CLEC customers, where a call to a valid telephone number was not completed by the network because of ILEC-controlled capacity limitations or other ILEC network trouble, also is accumulated during the reporting period. At the end of the reporting period, the total number of blocked attempts is divided by the total number of attempts and the ratio is expressed as a percentage. For inbound calling, the results will measure calls originating on the ILEC's network and blocked from terminating on the CLEC's network.

- CLECs may agree to call completion reports in lieu of, or in addition to, blocking reports

For ILEC Results: The approach is identical to that described for the CLEC, except that the network performance is measured only for representative ILEC service configurations.

Levels of Disaggregation and Data Retention Requirements
See Appendix F

Performance Standard
Common Trunks: No more than 1% of end offices may have more than 2% blockage per month based on the Erlang B.01 scale. Where CLEC traffic traverses a separate common network from LEC traffic, no more than 2% of end offices may have more than 2% blocking.

Dedicated Trunks: Engineered so that no trunk group may have more than 1% blockage (B.01 design standard) per month.

Measurement Detail and Standards
Network Performance

Measurement

Percent of ILEC Responses to Reciprocal Trunk Requests in X Days

Function
ILEC Resizing of Trunks to Avoid Blocking

Calculation Methodology
Percent of ILEC Responses to Reciprocal Trunk Requests in X Days = Σ [(Number of ASRs/FOCs Sent in X Days Responding to CLEC TGSR/Email or ASR Requesting Resizing of Inbound Trunk Groups From ILEC to CLEC) / (All Requests for Resizing)] x 100

Business Rules
- Count begins when CLEC requests additional inbound trunks because the addition of a new customer will cause blocking on existing trunk groups from the ILEC to the CLEC.
- Requests may be sent though email, Trunk Group Service Requests or by an ASR with ILECs ACNA instead of CLEC identification used for outbound trunks ordered from ILEC.
- Count stops when CLEC receives an ILEC ASR or FOC, depending on which CLEC ordering method provides complete and accurate information and a committed due date in line with intervals established for outbound trunks.

Levels of Disaggregation and Data Retention Requirements
See Appendix A

Performance Standard
98% in 5 days
100% in same interval as FOC for outbound trunk requests found in Appendix I